

- 8 -

REMARKS

The Examiner's rejections, and comments about allowable subject matter, have been carefully studied, and are appreciated. Applicants wish first to address the Examiner's Indication of Allowable Subject Matter.

As to claims 3-5, these have been amended. Claim 3 has been cancelled and rewritten as independent claim 19, and claims 4 and 5 now depend from claim 19. The limitations of original claims 1 and 2 have been incorporated into claim 19 except for the following difference. To explain, it is necessary to set forth some background of the invention and subsequent progress.

The embodiment of the system illustrated in Figs. 1-- 15 was actually reduced to practice in the U.S. and was successfully tested at the facility of Dayton Systems Group, Inc. (the Assignee) in Miamisburg OH around the time of filing of the priority Provisional Application S.N. 60/272,060. The embodiment described in this application remains the preferred embodiment. However development subsequent to the filing of the PCT and U.S. national applications resulted in a somewhat different embodiment which employs a two part dome making system, wherein the domes are completed through the forming of the neck and the outward curl at the top of the neck, then the domes are detached from the strip of metal and transferred to the second apparatus of the two-part system which contains the thread lug tooling, and forms the thread lugs into the neck. This two-part system, and the preferred disclosed embodiment, are otherwise alike as regards the tooling and sequential operation. Thus, the inventive features are present in both embodiments and believed to be more properly covered in the amended claims.

For this reason, the word 'then' has been deleted from the last phrase of amended claim 6. Likewise the last phrase of claim 19 now recites that steps a) through g) are continued, step g) being the forming of the thread lugs on the necks. The essential steps of the method are the same, and this change does not (in Counsel's opinion) affect the patentability of the claims.

Therefore, it is believed that, having made the amendments suggested by the Examiner, claims 19, and 4-5 are allowable, and claims 6, and 8-11 likewise are

- 9 -

allowable.

Turning to claims 12-15, and the §102(e) rejection based on Enoki '776, there are fundamental differences between applicants' invention (as claimed) and the "bottle type can" disclosed by Enoki. First of all, the reference employs a continuous screw thread which is curled on to a neck, or fitted with "a cylindrical member of resin threaded in advance" (e.g. a molded plastic end). The present invention forms circumferentially aligned thread lugs which protrude outwardly from the neck. Enoki certainly does not anticipate applicants' invention, it doesn't even suggest it. There is no teaching in Enoki '776 which suggest how to create such thread lugs on the neck of a can end.

Regarding the rejection of claims 12-15 under §102(b) based on Diekhoff '843. That reference states (referring to its Fig. 11) that "[t]he threads 4 may be formed by a variety of techniques such as thread rollers similar to those shown in U.S. Pat. No. 2,409,788" [column 7, lines 23-25], or as in U.S. Pat. No. 5,293,765 [lines 38-39]. Again, those are rolled threads, they are not thread lugs circumferentially aligned around the neck, and there is no suggestion of such thread lugs and/or how to form them.

As to claims 16-18 and the combination of Diekhoff '843 with Brown et al '287, those disclosures are directed to different areas of the metal container art. Brown produces shells for can ends, wherein a shell preform is stamped in a first stage, then transferred rapidly by air streams to a second stage and formed into finished shells. Such shells may be used as permanent lids seamed to an open end of a can (which must be cut open), or as a beginning structure to which an easy open tab is added along with suitable partial scoring, to provide an easy-open can end (e.g. pop-top). None of that prior art has any suggestion of the multiple outwardly extending, circumferentially aligned, thread lugs of the present invention, nor is there any suggestion how the two stage operation of Brown, et al. could be combined with the Diekhoff disclosure to render obvious the present claims.

New dependent claim 20 provides further detail to the patentable subject matter of claim 13.

Paragraph 21 of the specification has been amended to incorporate the language found in original claims 1 and 10, for example, and as also clearly shown in

- 10 -

the figures. No new matter is introduced by this amendment, and it provides better correlation between the specification and the claims.

Therefore, it is urged that claims 4-6 and 8-20 define over the art of record, both applied and cited, and therefore should be allowed.

Respectfully submitted,

FAY, SHARPE, FAGAN,
MINNICH & MCKEE, LLP

04 May 2005
Date

Timothy E. Nauman
Timothy E. Nauman
Reg. No. 32,283
1100 Superior Avenue, 7th Floor
Cleveland, Ohio 44114-2579
(216) 861-5582

N:\DSGZ\200163A\MM5000885V001.doc